



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

Certified Mail No.:

Activity No.: PER20060013
 Agency Interest No. 3263

Oscar M. Corona
 Operations Group Leader
 Taminco Higher Amines Inc
 Post Office Box 1
 St. Gabriel, LA 70776-0001

RE: Part 70 Operating Permit Modification, St. Gabriel Plant,
 Taminco Higher Amines Inc., St. Gabriel, Iberville Parish, Louisiana

Dear Mr. Corona:

This is to inform you that the permit modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the 2nd of November, 2011, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and Agency Interest No. cited above should be referenced in future correspondence regarding this facility.

Done this _____ day of _____, 2007.

Permit No.: 1280-00031-V4

Sincerely,

Chuck Carr Brown, Ph.D.
 Assistant Secretary

CCB:SJT
 cc: EPA Region VI

ENVIRONMENTAL SERVICES
 : PO BOX 4313, BATON ROUGE, LA 70821-4313
 P:225-219-3181 F:225-219-3309
 WWW.DEQ.LOUISIANA.GOV

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
TAMINCO HIGHER AMINES INC., SAINT GABRIEL PLANT
PROPOSED PART 70 AIR OPERATING PERMIT MODIFICATION

The LDEQ, Office of Environmental Services, is accepting written comments on the Part 70 Air Operating Permit Modification for Taminco Higher Amines Inc., Post Office Box 1, St. Gabriel, LA 70776 for the St. Gabriel Plant. **The facility is located at 3790 Hwy 30, St. Gabriel, Iberville Parish.**

Taminco Higher Amines, Inc. is designed to manufacture higher alkylamines from ammonia and appropriate alcohols via a reaction and distillation operation. Taminco Higher Amines Inc. requested a Part 70 air operating permit modification for the St. Gabriel Plant.

Taminco wants to retro-fit the St. Gabriel site to allow the flexibility to purchase and use acetone as a raw material to produce isopropanol or to purchase isopropanol. Taminco is proposing to permit two options at this time with the intentions of modifying the permit to include only one of these options after determining which option better suits their needs.

Option 1 – Vapor Phase

The proposed modifications for this phase are as follows:

- Revise boiler calculations to address the flowrate and composition of the isopropyl flow to the boiler. As a result, a minimal increase in NH₃ is proposed;
- Add another scenario to allow the storage of acetone to TK-202 Storage Tank (Source ID 5-76) in addition to the storage of denatured ethanol, ethanol, and isopropyl alcohol. Since acetone is not a VOC or LTAP, an emission increase is not proposed;
- Revise TK-208 Storage Tank (Source 6-76) calculations to allow for the storage of isopropyl alcohol and acetone in addition to the storage of diisopropylamine (DIPA). Since storage of DIPA is considered to be the worst case for emissions, an emissions increase is not proposed;
- Revise fugitive emissions (Source ID 13-76) to include additional components from vapor phase acetone project.

Option 2 – Liquid Phase

The proposed modifications for this phase are as follows:

- Revise cooling tower U-331 (7-96) calculations to increase flow rate from 9,600 gpm to 12,000 gpm.
- Revise proposed TK-500 SU/SD (1-06) calculations to include vents from liquid phase hydrogenation reaction.
- Revise low pressure absorber (40-96) calculations to include two new streams from the acetone process.
- Revise fugitive emissions (13-76) to include fugitives from acetone project.
- Include NSPS Subpart RRR regulatory applicability to vent streams associate with the acetone process reactor.

Estimated emissions in tons per year (for both options combined) are as follows:

<u>Pollutant</u>	<u>Emissions</u>		
	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	13.92	15.46	+1.54
SO ₂	0.48	0.48	-
NO _x	115.84	115.84	-
CO	3.32	3.32	-
VOC	62.80	69.56	+6.76

A technical review of the working draft of the proposed permit was submitted to the facility representative and the LDEQ Surveillance Division. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Thursday, May 10, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The permit application, proposed Part 70 air operating permit modification and statement of basis are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Additional copies may be reviewed at the Iberville Parish Library, East Iberville Branch, 5715 Monticello Street, St. Gabriel, LA 70776.

Inquiries or requests for additional information regarding this permit action should be directed to Scott J. Templet, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3059.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at maillistrequest@ldeq.org or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the proposed permit and statement of basis can be viewed at the LDEQ permits public notice webpage at www.deq.state.la.us/news/PubNotice/ and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at http://www.state.la.us/ldbc/listservpage/ldeq_pn_listserv.htm.

All correspondence should specify AI Number 3263, Permit Number 1280-00031-V4, and Activity Number PER20060013.

Scheduled Publication Date: April 5, 2007

**AIR PERMIT BRIEFING SHEET
PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**ST. GABRIEL PLANT
AGENCY INTEREST NO.: 3263
TAMINCO HIGHER AMINES INC
ST. GABRIEL, IBERVILLE PARISH, LOUISIANA**

I. Background

Taminco Higher Amines, Inc. owns and operates the St. Gabriel Plant located at 3790 Highway 30 in Iberville Parish, Louisiana. Currently, the facility operates under Title V permit 1280-00031-V3, issued January 16, 2007. The site (formerly Air Products and Chemicals, Inc.) had an ownership transfer to Taminco Higher Amines Inc. on October 17, 2006.

II. Origin

A permit application and Emission Inventory Questionnaire was submitted by Taminco Higher Amines Inc. on November 22, 2006 requesting a minor modification to the Part 70 operating permit. Additional information dated February 16, 2007 was also received.

III. Description

The St. Gabriel Plant is designed to manufacture higher alkylamines from ammonia and appropriate alcohols via two continuous process trains that each produces separate types of alkylamines. Each train is divided into a reaction and distillation operation. In the reaction operation, the raw materials are vaporized, reacted in the gas phase over fixed beds of catalysts, and cooled to separate non-condensable by-products. In the distillation process, the desired amine product is separated from unreacted raw material and light and heavy by-products.

Currently, monoisopropylamine is produced by reacting isopropanol and ammonia. Taminco wants to retro-fit the St. Gabriel site to allow the flexibility to purchase and use acetone as a raw material to produce isopropanol or to purchase isopropanol. Taminco is proposing to permit two options at this time with the intentions of modifying the permit to include only one of these options after determining which option better suits their needs.

Option 1 – Vapor Phase

Taminco is proposing to retro-fit their existing propyl's unit to allow for the use of acetone as a raw material in the production on monoisopropylamine. This project option involves making piping and pump additions around the existing TK-208 storage vessel which would allow pumping acetone from storage directly to the existing MIPA reactor process. Prior to introduction into the first reactor, an inline vaporizer will heat the acetone. This vaporizer makes use of existing heat, via a loop system, from the reactor and is not a combustion device. The only associated emissions with the inline vaporizer are fugitive emissions.

Initially, acetone will be introduced into the reactor with isopropanol. However, to achieve the desired 100% usage of acetone, the two existing MIPA reactors will be placed in series. Once the reactors are placed in series, another vaporizer with integrated loop system will be installed to feed the second reactor.

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This project option will increase in secondary fuel flow to the boilers, but it will not result in an increase in boiler steam demand and there will be no changes to regulated VOC components at the low pressure absorbers. It is also important to note that this will not result in an increase in production capability of the facility.

The proposed modifications for this option are as follows:

- Revise boiler calculations to address the flowrate and composition of the isopropyl flow to the boiler. As a result, a minimal increase in NH_3 is proposed;
- Add another scenario to allow the storage of acetone to TK-202 Storage Tank (Source ID 5-76) in addition to the storage of denatured ethanol, ethanol, and isopropyl alcohol. Since acetone is not a regulated VOC or LTAP, an emission increase is not proposed;
- Revise TK-208 Storage Tank (Source 6-76) calculations to allow for the storage of isopropyl alcohol and acetone in addition to the storage of diisopropylamine (DIPA). Since storage of DIPA is considered to be the worst case for emissions, an emissions increase is not proposed;
- Revise fugitive emissions (Source ID 13-76) to include additional components from vapor phase acetone project.

Option 2 – Liquid Phase

Taminco is proposing to retro-fit the St. Gabriel site with a liquid phase acetone reactor system. Acetone will be converted to isopropanol via a liquid phase hydrogenation reactor. The acetone reactor will provide the site with the flexibility to either purchase acetone and convert it to isopropanol or to purchase isopropanol directly for use as a raw material.

The proposed modifications for this option are as follows:

- Revise cooling tower U-331 (7-96) calculations to increase flow rate from 9,600 gpm to 12,000 gpm.
- Revise proposed TK-500 SU/SD (1-06) calculations to include vents from liquid phase hydrogenation reaction.
- Revise low pressure absorber (40-96) calculations to include two new streams from the acetone process.
- Revise fugitive emissions (13-76) to include fugitives from acetone project.
- Include NSPS Subpart RRR regulatory applicability to vent streams associate with the acetone process reactor.

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Estimated emissions in tons per year (for both options combined) are as follows:

<u>Pollutant</u>	<u>Emissions</u>		
	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	13.92	15.46	+1.54
SO ₂	0.48	0.48	-
NO _x	115.84	115.84	-
CO	3.32	3.32	-
VOC	62.80	69.56	+6.76

Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
Ammonia	9.48	9.49	+0.01
Acetaldehyde	0.21	0.21	-
Chlorine	0.01	0.014	+0.004
Ethylene Glycol	0.70	0.70	-
Ethylene Oxide	<0.01	<0.01	-
Sulfuric Acid	<0.001	<0.01	+<0.01
Triethylamine	3.94	3.94	-
Total	14.34	14.36	+0.014

IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, and New Source Performance Standards (NSPS). NESHAP and Prevention of Significant Deterioration do not apply.

This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a

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person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 200X; and in the <local paper>, <local town>, on <date>, 200X. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>. The draft permit was also submitted to US EPA Region VI on <date>. All comments will be considered prior to the final permit decision.

VII. Effects on Ambient Air

Dispersion Model Used: None

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Air Quality Standard (NAAQS)
Not Applicable			

VIII. General Condition XVII Activities

ID No.	Description	No. of Units	PM ₁₀ (TPY)	SO ₂ (TPY)	NO _x (TPY)	CO (TPY)	VOC (TPY)	NH ₃ (TPY)	TEA (TPY)
G1	Large Turnaround Air Compressor(s)	1	0.33	0.31	4.63	1.00	0.37	-	-
G2	Large Turnaround Pump(s)	1	0.34	0.32	4.82	1.04	0.38	-	-
G3	Large Turnaround Electrical Generator(s)	2	0.14	1.65	4.90	1.12	0.13	-	-
G4	Tank Cleaning Activities	N/A	-	-	-	-	4.77	0.02	0.75
G5	Small Turnaround Air Compressor(s)	3	0.34	0.31	4.74	1.02	0.38	-	-
G6	Small Turnaround Pump(s)	3	0.34	0.32	4.79	1.03	0.38	-	-
G7	Small Turnaround Electrical Generator(s)	2	0.33	0.31	4.65	1.00	0.37	-	-

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ID No.	Description	No. of Units	PM ₁₀ (TPY)	SO ₂ (TPY)	NO _x (TPY)	CO (TPY)	VOC (TPY)	NH ₃ (TPY)	TEA (TPY)
G8	Maintenance Light Towers	8	<0.01	0.32	4.77	0.01	0.38	-	-
G9	General Plant Maintenance Air Compressor 1	1	0.34	0.31	4.74	1.02	0.38	-	-
G10	General Plant Maintenance Air Compressor 2	1	0.34	0.31	4.74	1.02	0.38	-	-
G11	General Plant Maintenance Diesel Pump(s)	2	0.32	0.29	4.44	0.96	0.35	-	-
G12	General Plant Maintenance Electrical Generator(s)	2	0.28	0.26	3.97	0.86	0.32	-	-
G13	TK-207 Venting to Drum	N/A	-	-	-	-	0.33	-	-
G14	Change Tank Landing Losses	N/A	-	-	-	-	4.56	-	3.94
G15	Sock Filters	N/A	-	-	-	-	<0.01	-	-
G16	Sampling	N/A	-	-	-	-	0.35	0.32	0.02
G17	Pump Maintenance	N/A	-	-	-	-	0.14	0.06	0.03
G18	Instrument Maintenance	N/A	-	-	-	-	<0.01	-	-
G19	Vessel & Equipment Preparation	N/A	-	-	-	-	4.66	-	-
G20	Compressor Maintenance	N/A	-	-	-	-	0.09	0.18	0.04
G21	Parts Washer	N/A	-	-	-	-	0.01	-	-
G22	Honeywagon	N/A	-	-	-	-	0.04	-	-
G23	P-352 Fire Water Pump Diesel Exhaust	1	0.20	0.18	2.79	0.60	0.22	-	-
G24	P-312 Process Water Well Pump	1	0.06	0.06	0.89	0.19	0.07	-	-
G25	U-393 Emergency Generator	1	0.25	0.23	3.48	0.75	0.28	-	-

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IX. Insignificant Activities:

ID No.	Insignificant Activities	Capacity		Regulation Citation
3-76	FH101 Process Heater	5	MM BTU/hr	LAC 33:III.501.B.5.A.1
25-95	Storage Tank, TK-3211	1000	gallons	LAC 33:III.501.B.5.A.3
16-96	Treated Water Tank, TK-322	24000	gallons	LAC 33:III.501.B.5.B.8
17-96	Boiler Blowdown Tank, TK-3710	15200	gallons	LAC 33:III.501.B.5.B.8
21-96	Storage Tank, TK-333	55	gallons	LAC 33:III.501.B.5.A.2
22-96	Storage Tank, TK-331	1000	gallons	LAC 33:III.501.B.5.A.3
23-96	Storage Tank, TK-332	850	gallons	LAC 33:III.501.B.5.A.3
24-96	Amines Tank, TK-3212	500	gallons	LAC 33:III.501.B.5.A.3
27-96	Storage Tank, U-323	55	gallons	LAC 33:III.501.B.5.A.2
28-96	Storage Tank, U-322	55	gallons	LAC 33:III.501.B.5.A.2
29-96	Process Water Tank, TK-353	600000	gallons	LAC 33:III.501.B.5.B.8
30-96	Chilled Water Storage Tank, TK-216	7000	gallons	LAC 33:III.501.B.5.A.3
31-96	Day Tank for Emergency Generator, TK-354	300	gallons	LAC 33:III.501.B.5.A.3
33-96	Caustic Tank, TK-215	140000	gallons	LAC 33:III.501.B.5.A.10
34-96	Waste Treatment Caustic Tank, TK-375	7000	gallons	LAC 33:III.501.B.5.A.3
35-96	Diesel Fuel Tank, TK-311 (P312)	125	gallons	LAC 33:III.501.B.5.A.2
41-96	Firewater (P352) Diesel Tank, TK-352	325	gallons	LAC 33:III.501.B.5.A.3
TK-383	WWT Bulk Polymer	2437	gallons	LAC 33:III.501.B.5.A.3
TK-384	WWT Antifoam Tank	1485	gallons	LAC 33:III.501.B.5.A.3
N/A	Amines Day Tank, U-326	55	gallons	LAC 33:III.501.B.5.A.2
N/A	Clarifier Sulfite Tank, TK-3716	188	gallons	LAC 33:III.501.B.5.A.2
N/A	Diesel Storage (Red Box)	192	gallons	LAC 33:III.501.B.5.A.2
N/A	Kerosene Storage Tank	310	gallons	LAC 33:III.501.B.5.A.3
N/A	Laboratory Equipment/Vents	N/A		LAC 33:III.501.B.5.A.6
N/A	Misc. Inorganic and Organic Chemical Cleaning Storage Tanks	9500	gallons	LAC 33:III.501.B.5.A.3, 4 & 10
N/A	Portable Heaters	<1	MM BTU/hr	LAC 33:III.501.B.5.A.1
N/A	Sulfuric Acid Tank	3000	gallons	LAC 33:III.501.B.5.A.3
N/A	Water Washing Operations of Empty Drums	55	gallons	LAC 33:III.501.B.5.A.7

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ST. GABRIEL, IBERVILLE PARISH, LOUISIANA

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

Emission Point ID	Source Description	State Regulations (LAC 33:III. Chapter)													
		5 [▲]	9	11	13	15	21	22	29*	51*	56	59			
	Facility-Wide	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EQT032	1-06: TK-500 SU/SD														
EQT003	2-76: Boiler			1	1	1						1			
EQT004	2A-76: Boiler			1	1	1						1			
EQT005	4-76: TK-201										1				
EQT006	5-76: TK-202										1				
EQT001	6-76: TK-208										1				
EQT008	8-76B: TK-210										1				
EQT009	8-76C: TK-203										1				
EQT010	8-76D: TK-207										1				
EQT011	8-76E: TK-217										1				
EQT012	8-76F: TK-211										1				
EQT013	8-76G: TK-212										1				
EQT014	8-76H: TK-213										1				
EQT015	8-76I: TK-214										1				
EQT016	8-76J: TK-209										1				
EQT017	9-76: Loading Area										1				
EQT018	10-76: T-107 Low Pressure Absorber										2				
EQT019	11-76: TK-341										1				
EQT020	12-76: TK-343 No. 2 Fuel Oil Tank										3				
FUG001	13-76: Plant Fugitive Emissions										1				
EQT021	14-76: TK-342										1				

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Emission Point ID	Source Description	State Regulations (LAC 33:III.Chapter)													
		5 [▲]	9	11	13	15	21	22	29*	51*	56	59			
EQT030	WW-06: Wastewater Unit						2								
EQT022	7-96: U331 - Cooling Tower No. 1														
EQT026	39-96: U337 - Cooling Tower														
EQT023	9-96: Gasoline Tank						1								
EQT024	10-96: TK-324 Sulfuric Acid Tank						3				3				
EQT025	20-96: Sulfuric Acid Tank, TK-337						3				3				
EQT027	40-96: T-112 Low Pressure Absorber	1					1								
EQT028	41-96: C-101 Process Recycle Compressor						1								
EQT029	42-96: C-102 Process Recycle Compressor						1								
EQT033	Acetone Reactor														
EQT031	MIPA Skid Unit Scrubber (Recovery System)														

* The regulations indicated above are State Only regulations.

▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

KEY TO MATRIX

- 1 - The regulations have applicable requirements which apply to this particular emission source.
- 2 - The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 3 - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- Blank - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank - The regulations clearly do not apply to this type of emission source.

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Table 1. Applicable Louisiana and Federal Air Quality Requirements

Emission Point ID	Source Description	NSPS Subpart (40 CFR 60)											40 CFR							
		A	D	Da	Db	Dc	K	Ka	Kb	VV	NNN	RRR	YYY	61 V	63 Q	64	68	82		
	Facility-Wide																			
EQT032	1-06: TK-500 SU/SD																			
EQT003	2-76: Boiler	3	3	3	3	3														
EQT004	2A-76: Boiler	3	3	3	3	3														
EQT005	4-76: TK-201					3	3	3												
EQT006	5-76: TK-202					3	3	3												
EQT001	6-76: TK-208					3	3	3												
EQT008	8-76B: TK-210					3	3	3												
EQT009	8-76C: TK-203					3	3	3												
EQT010	8-76D: TK-207					3	3	3												
EQT011	8-76E: TK-217					3	3	3												
EQT012	8-76F: TK-211					3	3	3												
EQT013	8-76G: TK-212					3	3	3												
EQT014	8-76H: TK-213					3	3	3												
EQT015	8-76I: TK-214					3	3	3												
EQT016	8-76J: TK-209					3	3	3												
EQT017	9-76: Loading Area																			
EQT018	10-76: T-107 Low Pressure Absorber									3										
EQT019	11-76: TK-341					3	3	3												
EQT020	12-76: TK-343 No. 2 Fuel Oil Tank					3	3	3												
FUG001	13-76: Plant Fugitive Emissions																			3
EQT021	14-76: TK-342					3	3	3												
EQT030	WW-06: Wastewater Unit					3	3	3												1

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

ST. GABRIEL PLANT
 AGENCY INTEREST NO.: 3263
 TAMINCO HIGHER AMINES INC
 ST. GABRIEL, IBERVILLE PARISH, LOUISIANA

Table 1. Applicable Louisiana and Federal Air Quality Requirements

Emission Point ID	Source Description	NSPS Subpart (40 CFR 60)											40 CFR						
		A	D	Da	Db	Dc	K	Ka	Kb	VV	NNN	RRR	YYY	61 V	63 Q	64	68	82	
EQT022	7-96: U331 - Cooling Tower No. 1																		
EQT026	39-96: U337 - Cooling Tower																		
EQT023	9-96: Gasoline Tank						3	3	3										
EQT024	10-96: TK-324 Sulfuric Acid Tank						3	3	3										
EQT025	20-96: Sulfuric Acid Tank, TK-337						3	3	3										
EQT027	40-96: T-112 Low Pressure Absorber																	3	
EQT028	41-96: C-101 Process Recycle Compressor								1										
EQT029	42-96: C-102 Process Recycle Compressor								1										
EQT033	Acetone Reactor																		1
EQT031	MIPA Skid Unit Scrubber (Recovery System)																		

KEY TO MATRIX

- 1 - The regulations have applicable requirements which apply to this particular emission source.
- 2 - The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 3 - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- Blank - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank - The regulations clearly do not apply to this type of emission source.

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XI. Table 2. Explanation for Exemption status or Non-Applicability of a Source

ID. No.:	Requirement	Notes
Site Wide	Limiting Volatile Organic Compound Emissions from Cleanup Solvent Processing (LAC 33:III.2151)	DOES NOT APPLY. Facility does not use solvents.
2-76 (EQT 003) 2A-76 (EQT 004) Boilers	Comprehensive Toxic Air Pollutant Emission Control Program (LAC 33:III.Chapter 51) STATE ONLY	DOES NOT APPLY. Facility is a minor source for air toxic.
	Emission Standards for Sulfur Dioxide, Emission Limitations (LAC 33:III.1503)	EXEMPT. Unit emits less than 250 tons per year of sulfur compounds and is exempt from the 2,000 ppm(v) limitation per LAC 33:III.1503.C.
	NSPS Subpart Dc - Small Industrial - Commercial - Institutional Steam Generating Units (40 CFR 60.40c)	DOES NOT APPLY. The boilers were not constructed, reconstructed, modified after June 9, 1989.
	NSPS Subpart Db - Industrial - Commercial - Institutional Steam Generating Units (40 CFR 60.40b)	DOES NOT APPLY. The boilers were not constructed, reconstructed, modified after June 9, 1984.
	NSPS Subpart Da - Electric Utility Steam Generating Units (40 CFR 60.40a)	DOES NOT APPLY. The boilers have a heat input <250 MM BTU/hr and were not constructed, reconstructed, or modified after September 18, 1978.
	NSPS Subpart D - Fossil-Fuel-Fired Steam Boilers (40 CFR 60.40a)	DOES NOT APPLY. The boilers have a heat input <250 MM BTU/hr.

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XI. Table 2. Explanation for Exemption status or Non-Applicability of a Source

ID. No.:	Requirement	Notes
8-76D (TK-207) (EQT 010) 8-76E (TK-217) (EQT 011) 8-76J (TK-209) (EQT 016) Storage Tanks	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (40 CFR 60.110.b) NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110a)	DOES NOT APPLY. Tanks were not reconstructed or modified after July 23, 1984. DOES NOT APPLY. Tanks do not store petroleum liquids.
4-76 (TK-201) (EQT 005) 5-76 (TK-202) (EQT 006) 6-76 (TK-208) (EQT 001) 8-76B (TK-210) (EQT 008) 8-76C (TK-203) (EQT 009) 8-76F (TK-211) (EQT 012) 8-76G (TK-212) (EQT 013) 8-76H (TK-213) (EQT 014) 8-76I (TK-214) (EQT 015) 11-76 (TK-341) (EQT 019) 14-76 (TK-342) (EQT 021) Storage Tanks	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110) NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (40 CFR 60.110b) NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110a)	DOES NOT APPLY. Tanks do not store petroleum liquids. DOES NOT APPLY. Tanks do not store petroleum liquids. DOES NOT APPLY. Tanks were not reconstructed or modified after July 23, 1984. DOES NOT APPLY. Tanks do not store petroleum liquids.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

ST. GABRIEL PLANT
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XI. Table 2. Explanation for Exemption status or Non-Applicability of a Source

ID. No.:	Requirement	Notes
10-76 (EQT 018) T-107 Low Pressure Absorber	NSPS Subpart NNN- Standards of Performance for VOC Compound Emissions from SOCM I Distillation Operations (40 CFR 60.660)	DOES NOT APPLY. The distillation unit does not produce as a product, by-product, or intermediate product any of the chemicals listed in 40 CFR 60.667.
	NSPS Subpart RRR - Standards of Performance for VOC Emissions from SOCM I Reactor Processes (40 CFR 60.700)	DOES NOT APPLY. The distillation unit does not produce as a product, by-product, or intermediate product any of the chemicals listed in 40 CFR 60.707.
	Limiting VOC Emissions from SOCM I Reactor Process and Distillation Operations (LAC 33:III.2147)	EXEMPT. Tamnco Higher Amines claims source as an equivalent control device although it is not a combustion device.
	Compliance Assurance Monitoring (40 CFR 64)	DOES NOT APPLY. Source is an inherent process equipment.
12-76 (TK-343) (EQT 020) No. 2 Fuel Oil Tank	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (40 CFR 60.110.b)	DOES NOT APPLY. Tank is <75 m ³ (19,813 gallons). Tank was not constructed, reconstructed, or modified after July 23, 1984. Tank is <75 m ³ (19,813 gallons).
	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110a)	DOES NOT APPLY. Tank was not constructed, reconstructed, or modified after May 18, 1978.
	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110)	DOES NOT APPLY. Tank is <75 m ³ (19,813 gallons).
	Storage of Volatile Organic Liquids (LAC 33:III.2103)	DOES NOT APPLY. Vapor pressure < 1.5 psia.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

ST. GABRIEL PLANT
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 TAMINCO HIGHER AMINES INC
 ST. GABRIEL, IBERVILLE PARISH, LOUISIANA

XI. Table 2. Explanation for Exemption status or Non-Applicability of a Source		
ID. No.:	Requirement	Notes
13-76 (FUG 001) Plant Fugitives	NESHAP Subpart V- National Emission Standards for Equipment Leaks (fugitive emissions) (40 CFR 61.240)	DOES NOT APPLY. Does not meet applicability as per 40 CFR Part 61 Subpart A since facility is not a major source of HAPs.
9-96 (EQT 023) Gasoline Storage Tank	Fugitive Emission Control (LAC 33:III.2121)	DOES NOT APPLY. Subject to LAC 33:III.2122.
	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (40 CFR 60.110.b)	DOES NOT APPLY. Tank is <75 m ³ (19,813 gallons).
	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110a)	DOES NOT APPLY. Tank is <75 m ³ (19,813 gallons).
	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110)	DOES NOT APPLY. Tank is <75 m ³ (19,813 gallons).
10-96 (TK-324) (EQT 024) 20-96 (TK-337) (EQT 025) Sulfuric Acid Tanks	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (40 CFR 60.110.b)	DOES NOT APPLY. Do not store volatile organic liquids.
	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110a)	DOES NOT APPLY. Do not store volatile organic liquids.
	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110)	DOES NOT APPLY. Do not store volatile organic liquids.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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 ST. GABRIEL, IBERVILLE PARISH, LOUISIANA

XI. Table 2. Explanation for Exemption status or Non-Applicability of a Source

ID. No.:	Requirement	Notes
10-96 (TK-324) (EQT 024) 20-96 (TK-337) (EQT 025)	Storage of Volatile Organic Liquids (LAC 33:III.2103)	DOES NOT APPLY. Do not store volatile organic liquids.
Sulfuric Acid Tanks	Emission Control and Reduction Requirements and Standards - State Only (LAC 33:III.5109)	DOES NOT APPLY. Tanks emit sulfuric acid, a Class III toxic air pollutant. Facility emissions of sulfuric acid are less than the MER.
40-96 (EQT 027) T-112 Low Pressure Absorber	Compliance Assurance Monitoring (40 CFR 64)	DOES NOT APPLY. As defined in 40 CFR 64.1, the source is an inherent process equipment.
WW-06 (EQT 030) Wastewater Unit	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (40 CFR 60.110.b)	DOES NOT APPLY. Tanks were not constructed, reconstructed, or modified after July 23, 1984.
	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110a)	DOES NOT APPLY. Tanks associated with the Wastewater Unit do not store petroleum liquids.
	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids (40 CFR 60.110)	DOES NOT APPLY. Tanks associated with the Wastewater Unit do not store petroleum liquids.
	Storage of Volatile Organic Liquids (LAC 33:III.2103)	DOES NOT APPLY. Tanks associated with the Wastewater Unit store liquids with a vapor pressure <1.5 psia.
	Oil/ Water Separators (LAC 33:III.2109)	EXEMPT. Separates less than 200 gallon a day of materials containing VOC.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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XI. Table 2. Explanation for Exemption status or Non-Applicability of a Source

ID. No.:	Requirement	Notes
WW-06 (EQT 030) Wastewater Unit	Limiting Volatile Organic Compound (VOC) Emissions from Industrial Wastewater (LAC 33:III.2153)	DOES NOT APPLY. Unit does not meet the flow rate criteria (VOC concentration greater than or equal to 10,000 ppmw or a VOC concentration greater than or equal to 1000 ppmw and a flow rate greater than or equal to 10 liters per minute).
7-96 (U331) (EQT 022) 39-96 (U337) (EQT 026) Cooling Towers	NESHAP for Industrial Process Cooling Towers (40 CFR 63.400)	DOES NOT APPLY. Cooling towers do not operate with chromium-based water treatment chemicals.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of this permit.

40 CFR PART 70 GENERAL CONDITIONS

- A. The term of this permit shall be five (5) years from date of issuance. An application for a renewal of this 40 CFR Part 70 permit shall be submitted to the administrative authority no later than six months prior to the permit expiration date. Should a complete permit application not be submitted six months prior to the permit expiration date, a facility's right to operate is terminated pursuant to 40 CFR Section 70.7(c)(ii). Operation may continue under the conditions of this permit during the period of the review of the application for renewal. [LAC 33:III.507.E.1, E.3, E.4, reference 40 CFR 70.6(a)(2)]
- B. The conditions of this permit are severable; and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [Reference 40 CFR 70.6(a)(5)]
- C. Permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [LAC 33:III.507.B.2, reference 40 CFR 70.6(a)(6)(i) & (iii)]
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Reference 40 CFR 70.6(a)(6)(ii)]
- E. This permit does not convey any property rights of any sort, or an exclusive privilege. [Reference 40 CFR 70.6(a)(6)(iv)]
- F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information. [LAC 33:III.507.B.2, 517.F, reference 40 CFR 70.6(a)(6)(v)]
- G. Permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR Section 70.6(a)(7). [LAC 33:III.501.C.2, reference 40 CFR 70.6(a)(7)]

40 CFR PART 70 GENERAL CONDITIONS

- H. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to perform the following:
 - 1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(i)];
 - 2. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(ii)];
 - 3. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iii)]; and
 - 4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iv)]

- I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and all reports required by the permit. [Reference 40 CFR 70.6(a)(3)(ii)(B)]

- J. Records of required monitoring shall include the following:
 - 1. the date, place as defined in the permit, and time of sampling or measurements;
 - 2. the date(s) analyses were performed;
 - 3. the company or entity that performed the analyses;
 - 4. the analytical techniques or methods used;
 - 5. the results of such analyses; and
 - 6. the operating conditions as existing at the time of sampling or measurement. [Reference 40 CFR 70.6(a)(3)(ii)(A)]

- K. Permittee shall submit at least semiannually, reports of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements, certified by a responsible company official. For previously reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The semiannual reports shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding period encompassing July through December and September 30 for the preceding period encompassing January through June. Any quarterly deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R may be consolidated with the semi-annual reports required by this general condition as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [LAC 33:III.507.H, reference 40 CFR 70.6(a)(3)(iii)(A)]

- L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR Section 70.5 (c) (8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR Section 70.6 (c) (4). [LAC 33:III.507.H.1, reference 40 CFR 70.6(c)(4)]

40 CFR PART 70 GENERAL CONDITIONS

- M. Compliance certifications per LAC 33:III.507.H.5 shall be submitted to the Administrator as well as the permitting authority. For previously reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding calendar year. [LAC 33:III.507.H.5, reference 40 CFR 70.6(c)(5)(iv)]

- N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to any emergency or upset provisions in any applicable regulation, notify the permitting authority within 2 working days of the time when emission limitations were exceeded due to the occurrence of an upset. In the event of an upset, as defined under LAC 33:III.507.J, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an emergency occurred and the cause was identified; 2) the permitted facility was being operated properly at the time; and 3) during the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit. [LAC 33:III.507.J.2, reference 40 CFR 70.6(g)(3)(iv) & (i-iii)]

- O. Permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act. [Reference 40 CFR 70.6(a)(4)]

- P. Any permit issued pursuant to 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR Section 70.7(f) or LAC 33:III.529. [LAC 33:III.529.A-B, reference 40 CFR 70.7(f)]

- Q. Permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the following criteria are met:
 - 1. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;
 - 2. increases in permitted emissions will not exceed five tons per year for any regulated pollutant;
 - 3. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III. Chapter 51 or under Section 112 (g) of the Clean Air Act;
 - 4. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment and would not trigger the applicability of any federally applicable requirement;
 - 5. changes in emissions would not qualify as a significant modification; and
 - 6. the request is submitted no later than 12 months after commencing operation. [LAC 33:III.523.A, reference 40 CFR 70.7(d)]

40 CFR PART 70 GENERAL CONDITIONS

- R. Permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance, Enforcement Division. All such reports shall be certified by a responsible official in accordance with 40 CFR 70.5(d).
1. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
 2. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
 3. A written report shall be submitted quarterly to address all permit deviations not included in paragraphs 1 or 2 above. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The quarterly deviation reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by Part 70 General Condition K as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. For previously reported permit deviations, in lieu of attaching the individual deviation reports, the quarterly report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any permit deviations occurring during the corresponding specified calendar quarter:
 - a. Report by June 30 to cover January through March
 - b. Report by September 30 to cover April through June
 - c. Report by December 31 to cover July through September
 - d. Report by March 31 to cover October through December
 4. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided such reports are certified in accordance with 40 CFR 70.5(d) and contain all information relevant to the permit deviation. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107. [Reference 40 CFR 70.6(a)(3)(iii)(B)]
- S. Permittee shall continue to comply with applicable requirements on a timely basis, and will meet on a timely basis applicable requirements that become effective during the permit term. [Reference 40 CFR 70.5(c)(8)(iii)]

40 CFR PART 70 GENERAL CONDITIONS

- T. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;
 2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;
 3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161;
 4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166. ("MVAC-like appliance" as defined at 40 CFR 82.152);
 5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156; and
 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [Reference 40 CFR 82, Subpart F]
- U. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. [Reference 40 CFR 82, Subpart B]

- V. Data availability for continuous monitoring or monitoring to collect data at specific intervals: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the Specific Requirements (or Table 3) of this permit, the minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This condition does not apply to Leak Detection and Repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.

- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.

- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated November 22, 2006, along with supplemental information dated February 16, 2007.

- IV. This permit shall become invalid, for the sources not constructed, if:
 - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
 - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.

The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.

This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.

- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.

- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.

- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.

- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.

- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.

- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.
 - A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
 - B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
 - C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:
 1. Report by June 30 to cover January through March
 2. Report by September 30 to cover April through June
 3. Report by December 31 to cover July through September
 4. Report by March 31 to cover October through December

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- D. Each report submitted in accordance with this condition shall contain the following information:
 - 1. Description of noncomplying emission(s);
 - 2. Cause of noncompliance;
 - 3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
 - 4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
 - 5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.

- E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.

- XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:
 - A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
 - B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
 - C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
 - D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.

- XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.

- XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services, Air Permits Division, within ninety (90) days after the event, to amend this permit.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
 - 1. Generally be less than 5 TPY
 - 2. Be less than the minimum emission rate (MER)
 - 3. Be scheduled daily, weekly, monthly, etc., or
 - 4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]

These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

- XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division
 La. Dept. of Environmental Quality
 Post Office Box 4302
 Baton Rouge, Louisiana 70821-4302

- XIX. Certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

General Information

AI ID: 3263 Taminco Higher Amines Inc
Activity Number: PER20060013
Permit Number: 1280-00031-V4
Air - Title V General Permit Minor Mod

ID	Name	User Group	Start Date
1280-00031	Taminco Higher Amines Inc	CDS Number	08-05-2002
1280-0020	Taminco Higher Amines Inc	Emission Inventory	03-03-2004
23-1274455	Air Products & Chemicals - St Gabriel Plant	Federal Tax ID	11-20-1999
LAD085551877	Taminco Higher Amines Inc	Hazardous Waste Notification	09-22-2006
LAD085551877	Air Products & Chemicals - St Gabriel Plant	Inactive & Abandoned Sites	11-01-1979
LA0046361	LPDES #	LPDES Permit #	06-25-2003
WP1645	LWDPS #	LWDPS Permit #	06-25-2003
	Taminco Higher Amines Inc	Multimedia	09-29-2006
GD-047-1504	Priority 2 Emergency Site	Priority 2 Emergency Site	07-20-2006
	Site ID #	Solid Waste Facility No.	08-14-2001
1280-0031	Toxic Emissions Data Inventory #	Toxic Emissions Data Inventory #	01-01-1991
70776RPRDCHIGHW	TRI #	Toxic Release Inventory	07-08-2004

Physical Location:

3790 Hwy 30
 St. Gabriel, LA 70776

Main FAX: 2256424251
Main Phone: 2256424226

Mailing Address:

PO Box 1
 St Gabriel, LA 707760001

Location of Front Gate:

30° 15' 6" latitude, 91° 5' 28" longitude, Coordinate Method: Interpolation - Map, Coordinate Datum: NAD83

Related People:

Name	Mailing Address	Phone (Type)	Relationship
Oscar M. Corona	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Responsible Official for
William V. Henry	PO Box 1 St. Gabriel, LA 707760001	2256424213 (WP)	Accident Prevention Contact for
William V. Henry	PO Box 1 St. Gabriel, LA 707760001	2256425203 (WF)	Accident Prevention Contact for
William V. Henry	PO Box 1 St. Gabriel, LA 707760001	2256425203 (WF)	Accident Prevention Billing Party for
William V. Henry	PO Box 1 St. Gabriel, LA 707760001	2256424213 (WP)	Accident Prevention Billing Party for
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	2256423169 (WP)	Air Permit Contact For
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	2256423169 (WP)	TEDI Contact for
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	JONATHAN.MELLAR	TEDI Contact for
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	2256423169 (WP)	Haz. Waste Billing Party for
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	JONATHAN.MELLAR	Haz. Waste Billing Party for
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	JONATHAN.MELLAR	Air Permit Contact For
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	2256423169 (WP)	Emission Inventory Contact for
Jonathan M. Mellard	PO Box 1 St. Gabriel, LA 707760001	JONATHAN.MELLAR	Emission Inventory Contact for

Related Organizations:

Name	Address	Phone (Type)	Relationship

General Information

AI ID: 3263 Taminco Higher Amines Inc
Activity Number: PER20060013
Permit Number: 1280-00031-V4
Air - Title V General Permit Minor Mod

Related Organizations:	Name	Address	Phone (Type)	Relationship
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Air Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424251 (WF)	Air Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Accident Prevention Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424251 (WF)	Accident Prevention Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Solid Waste Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424251 (WF)	Solid Waste Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Haz. Waste Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424251 (WF)	Haz. Waste Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Water Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424251 (WF)	Water Billing Party for
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Owns
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424251 (WF)	Owns
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424226 (WP)	Operates
	Taminco Higher Amines Inc	PO Box 1 St. Gabriel, LA 707760001	2256424251 (WF)	Operates

SIC Codes: 2869, Industrial organic chemicals, nec

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 219-3247 or email your changes to facupdate@la.gov.

INVENTORIES

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
 Air - Title V General Permit Minor Mod

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
EQT001	6-76: TK208 Storage Tank	250850 gallons		466667 gallons/yr		8760 hr/yr (All Year)
EQT003	2-76: Boiler		105 MM BTU/hr	100 MM BTU/hr		8760 hr/yr (All Year)
EQT004	2A-76: Boiler		105 MM BTU/hr	100 MM BTU/hr		8760 hr/yr (All Year)
EQT005	4-76: TK-201 Storage Tank	1.13 million gallons		28.9 MM gallons/yr		8760 hr/yr (All Year)
EQT006	5-76: TK-202 Storage Tank	1.13 million gallons		26.87 MM gallons/yr		8760 hr/yr (All Year)
EQT008	8-76B: TK-210 Storage Tank	1.1 million gallons		5.33 MM gallons/yr		8760 hr/yr (All Year)
EQT009	8-76C: TK-203 Storage Tank	976371 gallons		8.87 MM gallons/yr		8760 hr/yr (All Year)
EQT010	8-76D: TK-207 Storage Solution Tank	26652 gallons				8760 hr/yr (All Year)
EQT011	8-76E: TK-217 Storage Tank	458089 gallons				8760 hr/yr (All Year)
EQT012	8-76F: TK-211 Change Tank	75000 gallons		740463 gallons/yr		8760 hr/yr (All Year)
EQT013	8-76G: TK-212 Change Tank	75000 gallons		740463 gallons/yr		8760 hr/yr (All Year)
EQT014	8-76H: TK-213 Change Tank	75000 gallons		740463 gallons/yr		8760 hr/yr (All Year)
EQT015	8-76I: TK-214 Change Tank	75000 gallons		740463 gallons/yr		8760 hr/yr (All Year)
EQT016	8-76J: TK-209 Storage Tank	1.54 million gallons				8760 hr/yr (All Year)
EQT017	9-76: Loading Area			123 MM lbs/yr		5808 hr/yr (All Year)
EQT018	10-76: T-107 Low Pressure Absorber					8760 hr/yr (All Year)
EQT019	11-76: TK-341 Storage Tank	250000 gallons		14.76 MM gallons/yr		8760 hr/yr (All Year)
EQT020	12-76: TK-343 No. 2 Fuel Oil Tank	15230 gallons		11207 gallons/yr		8760 hr/yr (All Year)
EQT021	14-76: TK-342 Storage Tank	21742 gallons		14.76 MM gallons/yr		8760 hr/yr (All Year)
EQT022	7-96: U331 Large Cooling Tower No. 1			12000 gallons/min		8760 hr/yr (All Year)
EQT023	9-96: Gasoline Tank	580 gallons		4907 gallons/yr		8760 hr/yr (All Year)
EQT024	10-96: TK-324 Utilities Sulfuric Acid Tank	6500 gallons		12562 gallons/yr		8760 hr/yr (All Year)
EQT025	20-96: Sulfuric Acid Tank, TK-337	450 gallons		8375 gallons/yr		8760 hr/yr (All Year)
EQT026	39-96: U337 - Cooling Tower			3200 gallons/min		8760 hr/yr (All Year)
EQT027	40-96: T-112 Low Pressure Absorber			1244 lb/hr		8760 hr/yr (All Year)
EQT028	41-96: C-101 Process Recycle Compressor		150 horsepower			8760 hr/yr (All Year)
EQT029	42-96: C-102 Process Recycle Compressor		400 horsepower			8760 hr/yr (All Year)
EQT030	WW-06: Wastewater Unit					8760 hr/yr (All Year)
EQT031	MIPA Skid Unit Scrubber (Recovery System)					8760 hr/yr (All Year)
EQT032	1-06: TK-500 SU/SD					600 hr/yr (All Year)
EQT033	Acetone Reactor					8760 hr/yr (All Year)
FUG001	13-76: Plant Fugitive Emissions					8760 hr/yr (All Year)

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP006	Entire Facility	EQT1 6-76: TK208 Storage Tank

INVENTORIES

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
 Air - Title V General Permit Minor Mod

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP006	Entire Facility	EQT3 2-76: Boiler
GRP006	Entire Facility	EQT4 2A-76: Boiler
GRP006	Entire Facility	EQT5 4-76: TK-201 Storage Tank
GRP006	Entire Facility	EQT6 5-76: TK-202 Storage Tank
GRP006	Entire Facility	EQT8 8-76B: TK-210 Storage Tank
GRP006	Entire Facility	EQT9 8-76C: TK-203 Storage Tank
GRP006	Entire Facility	EQT10 8-76D: TK-207 Storage Solution Tank
GRP006	Entire Facility	EQT11 8-76E: TK-217 Storage Tank
GRP006	Entire Facility	EQT12 8-76F: TK-211 Change Tank
GRP006	Entire Facility	EQT13 8-76G: TK-212 Change Tank
GRP006	Entire Facility	EQT14 8-76H: TK-213 Change Tank
GRP006	Entire Facility	EQT15 8-76I: TK-214 Change Tank
GRP006	Entire Facility	EQT16 8-76J: TK-209 Storage Tank
GRP006	Entire Facility	EQT17 9-76: Loading Area
GRP006	Entire Facility	EQT18 10-76: T-107 Low Pressure Absorber
GRP006	Entire Facility	EQT19 11-76: TK-341 Storage Tank
GRP006	Entire Facility	EQT20 12-76: TK-343 No. 2 Fuel Oil Tank
GRP006	Entire Facility	EQT21 14-76: TK-342 Storage Tank
GRP006	Entire Facility	EQT22 7-96: U331 Large Cooling Tower No. 1
GRP006	Entire Facility	EQT23 9-96: Gasoline Tank
GRP006	Entire Facility	EQT24 10-96: TK-324 Utilities Sulfuric Acid Tank
GRP006	Entire Facility	EQT25 20-96: Sulfuric Acid Tank, TK-337
GRP006	Entire Facility	EQT26 39-96: U337 - Cooling Tower
GRP006	Entire Facility	EQT27 40-96: T-112 Low Pressure Absorber
GRP006	Entire Facility	EQT28 41-96: C-101 Process Recycle Compressor
GRP006	Entire Facility	EQT29 42-96: C-102 Process Recycle Compressor
GRP006	Entire Facility	EQT30 WW-06: Wastewater Unit
GRP006	Entire Facility	EQT31 MIPA Skid Unit Scrubber (Recovery System)
GRP006	Entire Facility	EQT32 1-06: TK-500 SU/SD
GRP006	Entire Facility	EQT33 Acetone Reactor
GRP006	Entire Facility	FUG1 13-76: Plant Fugitive Emissions

Relationships:

Subject Item	Relationship	Subject Item
EQT10 8-76D: TK-207 Storage Solution Tank	Vents to	EQT31 MIPA Skid Unit Scrubber (Recovery System)
EQT11 8-76E: TK-217 Storage Tank	Vents to	EQT31 MIPA Skid Unit Scrubber (Recovery System)
EQT16 8-76J: TK-209 Storage Tank	Vents to	EQT31 MIPA Skid Unit Scrubber (Recovery System)

INVENTORIES

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
 Air - Title V General Permit Minor Mod

Relationships:

Subject Item	Relationship	Subject Item
EQT31 MIPA Skid Unit Scrubber (Recovery System)	Vents to	EQT27 40-96: T-112 Low Pressure Absorber

Stack Information:

ID	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
EQT003 2-76: Boiler		28210			80	360
EQT004 2A-76: Boiler		28210			80	360
EQT028 41-96: C-101 Process Recycle Compressor			.08		30	115
EQT029 42-96: C-102 Process Recycle Compressor			.08		15	115

Fee Information:

Subj Item Id	Multiplier	Units Of Measure	Fee Desc
GRP006	488	MM Lb/Yr	0630 - Organic Oxides, Alcohols, Glycols (Rated Capacity)

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
 Air - Title V General Permit Minor Mod

All phases

Subject Item	PM ₁₀			SO ₂			NOx			CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 001 8-76															0.46
EQT 003 2-76	0.68	0.76	3.00	0.05	0.06	0.24	13.22	14.70	57.92	0.38	0.42	1.66	0.50	0.55	2.17
EQT 004 2A-76	0.68	0.76	3.00	0.05	0.06	0.24	13.22	14.70	57.92	0.38	0.42	1.66	0.50	0.55	2.17
EQT 005 4-76													0.07		0.30
EQT 006 5-76													0.07		0.30
EQT 008 8-76B													0.53		2.34
EQT 009 8-76C													0.18		0.80
EQT 012 8-76F													0.27		1.17
EQT 013 8-76G													0.27		1.17
EQT 014 8-76H													0.27		1.17
EQT 015 8-76I													0.27		1.17
EQT 017 9-76													2.25	82.73	6.40
EQT 018 10-76													1.81	90.39	7.92
EQT 019 11-76													0.21		0.94
EQT 020 12-76													0.001		0.003
EQT 021 14-76													0.12		0.54
EQT 022 7-96	1.76		7.69										0.01		0.03
EQT 023 9-96													0.01		0.05

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
 Air - Title V General Permit Minor Mod

All phases

Subject Item	PM ₁₀			SO ₂			NOx			CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 026 39-96	0.41		1.77										0.002		0.01
EQT 027 40-96													2.91	4.37	12.75
EQT 028 41-96													0.03	0.62	0.14
EQT 029 42-96													0.10	1.92	0.42
EQT 030 WW-06													0.73		3.21
EQT 032 1-06													1.45		6.33
FUG 001 13-76													4.02		17.60

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Phase Totals:

PM10: 15.46 tons/yr
 SO2: 0.48 tons/yr
 NOx: 115.84 tons/yr
 CO: 3.32 tons/yr
 VOC: 69.56 tons/yr

Emission rates Notes:

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
 Air - Title V General Permit Minor Mod

All phases

Subject Item	Acetaldehyde			Ammonia			Chlorine			Ethylene glycol			Ethylene oxide		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 003 2-76				< 0.001	< 0.001	0.001									
EQT 004 2A-76				< 0.001	< 0.001	0.001									
EQT 009 8-76C															
EQT 012 8-76F				0.19		0.81									
EQT 013 8-76G				0.19		0.81									
EQT 014 8-76H				0.19		0.81									
EQT 015 8-76I				0.19		0.81									
EQT 017 9-76															
EQT 018 10-76				0.13	6.26	0.55									
EQT 022 7-96				0.01		0.06	0.003		0.01						
EQT 024 10-96															
EQT 025 20-96															
EQT 026 39-96				0.002		0.01	0.001		0.004						
EQT 028 41-96				0.04	0.79	0.17									
EQT 029 42-96				0.09	1.82	0.40									
EQT 030 WW-06	0.05		0.21	0.02		0.07						0.70	0.001		< 0.01
EQT 032 1-06				0.04		0.18									
FUG 001 13-76				1.10		4.81									

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
 Air - Title V General Permit Minor Mod

All phases

Subject Item	Sulfuric acid			Triethyl amine		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 003 2-76						
EQT 004 2A-76						
EQT 009 8-76C				0.18		0.80
EQT 012 8-76F				0.05		0.24
EQT 013 8-76G				0.05		0.24
EQT 014 8-76H				0.05		0.24
EQT 015 8-76I				0.05		0.24
EQT 017 9-76				0.07	0.13	0.07
EQT 018 10-76				0.08	4.12	0.36
EQT 022 7-96						
EQT 024 10-96	< 0.001		< 0.001			
EQT 025 20-96	< 0.001		< 0.001			
EQT 026 39-96						
EQT 028 41-96						
EQT 029 42-96				< 0.01	0.04	0.01
WW-06 EQT 030				0.001		0.004
1-06 EQT 032						
FUG 001 13-76				0.40		1.74

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 3263 - Taminco Higher Amines Inc
Activity Number: PER20060013
Permit Number: 1280-00031-V4
Air - Title V General Permit Minor Mod

All phases

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Parameter Totals:

Acetaldehyde: 0.21 tons/yr
Ammonia: 9.49 tons/yr
Chlorine: 0.014 tons/yr
Ethylene glycol: 0.70 tons/yr
Ethylene oxide: <0.01 tons/yr
Sulfuric acid: <0.01 tons/yr
Triethyl amine: 3.94 tons/yr

Emission Rates Notes:

SPECIFIC REQUIREMENTS

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EQT001 **6-76: TK208 Storage Tank**

- 1 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 2 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 3 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 4 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 5 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 6 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT003 **2-76: Boiler**

- 7 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1101.B]
 Which Months: All Year Statistical Basis: None specified
- 8 Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel). [LAC 33:III.1313.C]
 Which Months: All Year Statistical Basis: None specified
- 9 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]
 10 Nitrogen oxides <= 0.2 lb/MMBTU. [LAC 33:III.2201.D.1]
 Which Months: May-Sep Statistical Basis: Thirty-day rolling average
- 11 Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter. [LAC 33:III.2201.H.1.a.i]
 Which Months: May-Sep Statistical Basis: None specified
- 12 Fuel recordkeeping by electronic or hard copy daily. Record fuel gas composition. [LAC 33:III.2201.H.9]
- 13 Submit report: Due within 90 days of the end of each quarter for any noncompliance of the applicable emission limitations of LAC 33:III.2201.D or E. Include the information specified in LAC 33:III.2201.I.2.a through I.2.d. [LAC 33:III.2201.I.2]
- 14 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records of the information specified in LAC 33:III.2201.I.3 and I.4 as applicable. [LAC 33:III.2201.I]

EQT004 **2A-76: Boiler**

SPECIFIC REQUIREMENTS

AI ID: 3263 - Taminco Higher Amines Inc
 Activity Number: PER20060013
 Permit Number: 1280-00031-V4
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EQT004 2A-76: Boiler

- 15 Opacity \leq 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1101.B]
 Which Months: All Year Statistical Basis: None specified
- 16 Total suspended particulate \leq 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel). [LAC 33:III.1313.C]
 Which Months: All Year Statistical Basis: None specified
- 17 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]
- 18 Nitrogen oxides \leq 0.2 lb/MMBTU. [LAC 33:III.2201.D.1]
 Which Months: May-Sep Statistical Basis: Thirty-day rolling average
- 19 Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter. [LAC 33:III.2201.H.1.a.i]
 Which Months: May-Sep Statistical Basis: None specified
- 20 Fuel recordkeeping by electronic or hard copy daily. Record fuel gas composition. [LAC 33:III.2201.H.9]
- 21 Submit report: Due within 90 days of the end of each quarter for any noncompliance of the applicable emission limitations of LAC 33:III.2201.D or E. Include the information specified in LAC 33:III.2201.I.2.a through I.2.d. [LAC 33:III.2201.I.2]
- 22 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records of the information specified in LAC 33:III.2201.I.3 and I.4 as applicable. [LAC 33:III.2201.I]

EQT005 4-76: TK-201 Storage Tank

- 23 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 24 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 25 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 26 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 27 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 28 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT006 5-76: TK-202 Storage Tank

- 29 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

SPECIFIC REQUIREMENTS

AI ID: 3263 - Taminco Higher Amines Inc

Activity Number: PER20060013

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EQT006 **5-76: TK-202 Storage Tank**

- 30 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 31 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 32 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 33 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 34 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT008 **8-76B: TK-210 Storage Tank**

- 35 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 36 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 37 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 38 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 39 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 40 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT009 **8-76C: TK-203 Storage Tank**

- 41 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 42 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 43 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]

SPECIFIC REQUIREMENTS

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EQT009 8-76C: TK-203 Storage Tank

- 44 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 45 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3 a-e. [LAC 33:III.2103.H.3]
- 46 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT010 8-76D: TK-207 Storage Solution Tank

- 47 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 48 VOC, Total >= 90 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.2]
 Which Months: All Year Statistical Basis: None specified
- 49 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3 a-e. [LAC 33:III.2103.H.3]
- 50 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT011 8-76E: TK-217 Storage Tank

- 51 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 52 VOC, Total >= 90 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.2]
 Which Months: All Year Statistical Basis: None specified
- 53 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3 a-e. [LAC 33:III.2103.H.3]
- 54 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT012 8-76F: TK-211 Change Tank

- 55 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 56 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 57 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 58 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 59 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3 a-e. [LAC 33:III.2103.H.3]

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EQT012 **8-76F: TK-211 Change Tank**

60 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT013 **8-76G: TK-212 Change Tank**

- 61 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 62 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 63 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 64 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 65 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 66 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT014 **8-76H: TK-213 Change Tank**

- 67 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 68 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 69 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 70 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 71 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 72 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT015 **8-76I: TK-214 Change Tank**

73 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

SPECIFIC REQUIREMENTS

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EQT015 **8-76I: TK-214 Change Tank**

- 74 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 75 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 76 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 77 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3 a-e. [LAC 33:III.2103.H.3]
- 78 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT016 **8-76J: TK-209 Storage Tank**

- 79 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 80 VOC, Total \geq 90 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.2103.E.2]
Which Months: All Year Statistical Basis: None specified
- 81 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3 a-e. [LAC 33:III.2103.H.3]
- 82 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT017 **9-76: Loading Area**

- 83 Equip with a vapor collection system consisting of, at a minimum, a vapor return line which returns all vapors displaced during loading to the VOC dispensing vessel or to a disposal system. [LAC 33:III.2107.B]
- 84 VOC, Total \geq 90 % DRE, using a vapor disposal system. [LAC 33:III.2107.B]
Which Months: All Year Statistical Basis: None specified
- 85 Prevent spills during the attachment and disconnection of filling lines or arms. Equip loading and vapor lines with fittings which close automatically when disconnected, or equip to permit residual VOC in the loading line to discharge into a collection system or disposal or recycling system. [LAC 33:III.2107.B]
- 86 VOC, Total monitored by visual, audible, and/or olfactory during loading or unloading, to detect leaks. [LAC 33:III.2107.C]
Which Months: All Year Statistical Basis: None specified
- 87 Discontinue loading or unloading through the affected transfer lines when a leak is observed; do not resume loading or unloading until the observed leak is repaired. [LAC 33:III.2107.C]
- 88 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2107.D.1 and 2. [LAC 33:III.2107.D]
- 89 Submit Notification: Due at the DEQ upon the establishment or reestablishment of any exceedance or excursion level, for purposes of responding to and reporting exceedances or excursions under 40 CFR 64.7 and 64.8. [40 CFR 64.6(c)(2)]
- 90 An excursion or exceedance is defined as when the annual average TOC concentration of the water exceeds 78,200 ppm. [40 CFR 64.6(c)(2)]

SPECIFIC REQUIREMENTS

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EQT017 **9-76: Loading Area**

- 91 Equipment/operational data recordkeeping by electronic or hard copy continuously. [40 CFR 64.6(c)(4)]
- 92 Conduct the monitoring required under 40 CFR 64 upon issuance of a part 70 or 71 permit that includes such monitoring, or by such later date specified in the permit pursuant to 40 CFR 64.6(d). [40 CFR 64.7(a)]
- 93 Maintain the monitoring required under 40 CFR 64 at all times, including but not limited to maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]
- 94 Restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable upon detecting an excursion or exceedance, in accordance with good air pollution control practices for minimizing emissions. Minimize the period of any startup, shutdown or malfunction, and take any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). [40 CFR 64.7(d)(1)]
- 95 Submit report: Due on and after the date specified in 40 CFR 64.7(a) by which the owner or operator must use monitoring that meets the requirements of 40 CFR 64. Submit monitoring reports to the DEQ in accordance with 40 CFR 70.6(a)(3)(ii). Include in a report for monitoring under 40 CFR 64, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the information specified in 40 CFR 64.9(a)(2)(i) through (a)(2)(iii), as applicable. [40 CFR 64.9(a)]
- 96 Comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). [40 CFR 64.9(b)(1)]
- 97 Monitoring data recordkeeping by electronic or hard copy continuously. Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]
- 98 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]

EQT019 **11-76: TK-341 Storage Tank**

- 99 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
- 100 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 101 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 102 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 103 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 104 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT021 **14-76: TK-342 Storage Tank**

- 105 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

SPECIFIC REQUIREMENTS

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EQT021 14-76: TK-342 Storage Tank

- 106 Equip internal floating roof with a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [LAC 33:III.2103.C.1.b]
- 107 Provide each opening in the internal floating roof (except rim space vents and automatic bleeder vents) with a projection below the liquid surface. In addition, provide each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) with a cover equipped with a gasket. Equip automatic bleeder vents and rim space vents with gaskets and equip ladder wells with a sliding cover. [LAC 33:III.2103.C.2]
- 108 Equip with an internal floating roof consisting of a pontoon type roof, double deck roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices will be gas-tight except when gauging or sampling is taking place. [LAC 33:III.2103.C]
- 109 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 110 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT023 9-96: Gasoline Tank

- 111 Equip with a submerged fill pipe. [LAC 33:III.2103.A]
- 112 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
- 113 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT027 40-96: T-112 Low Pressure Absorber

- 114 Total Organic Compounds (TOC) \geq 98 % reduction by weight, or TOC \leq 20 ppmv, on a dry basis corrected to 3% oxygen, whichever is less stringent. [LAC 33:III.2147.C.1.a]
- Which Months: All Year Statistical Basis: None specified
- 115 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2147.F.1 through F.4, as applicable. [LAC 33:III.2147.F]
- 116 Makeup water flow \geq 5 gpm; Temperature Rise \leq 20 Deg F, average hourly basis; Record once per shift. [LAC 33:III.501.c.6]

EQT028 41-96: C-101 Process Recycle Compressor

- 117 Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment. [LAC 33:III.2111]
- 118 Repair according to LAC 33:III.2122.C.3 any regulated component observed leaking by sight, sound, or smell, regardless of the leak's concentration, except those covered under LAC 33:III.2122.C.1.d. [LAC 33:III.2122.C.1.c]
- 119 Make every reasonable effort to repair a leaking component, as described in LAC 33:III.2122, within 15 days, except as provided. [LAC 33:III.2122.C.3]
- 120 Determine the percent of leaking components at a process unit for a test period using the equation in LAC 33:III.2122.C.4. [LAC 33:III.2122.C.4]
- 121 Determine the total percent of leaking and unrepairable components using the equation in LAC 33:III.2122.C.5. [LAC 33:III.2122.C.5]

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EQT028 **41-96: C-101 Process Recycle Compressor**

- 122 Compressor seals: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times a year). If a reading of 5,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.1.b.i]
 Which Months: All Year Statistical Basis: None specified
- 123 Flanged connectors: Presence of a leak monitored by visual, audible, and/or olfactory weekly. [LAC 33:III.2122.D.1.d.i]
 Which Months: All Year Statistical Basis: None specified
- 124 Instrumentation systems: Presence of a leak monitored by visual, audible, and/or olfactory weekly. [LAC 33:III.2122.D.1.e]
 Which Months: All Year Statistical Basis: None specified
- 125 All components: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of a leak detected by sight, smell, or sound, unless electing to implement actions as specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.3.b]
 Which Months: All Year Statistical Basis: None specified
- 126 When a component which has a leak that cannot be repaired, as described in LAC 33:III.2122.C, is located, affix to the leaking component a weatherproof and readily visible tag bearing an identification number and the date the leak is located. Remove the tag after the leak has been repaired. [LAC 33:III.2122.F.1]
- 127 Equipment/operational data recordkeeping by survey log upon each occurrence of a leak. Include the leaking component information specified in LAC 33:III.2122.F.2.a through j. Retain the survey log for two years after the latter date specified in LAC 33:III.2122.F.2 and make said log available to DEQ upon request. [LAC 33:III.2122.F]
- 128 Submit report: Due semiannually, by the 31st of January and July, to the Office of Environmental Assessment, Air Quality Assessment Division. Include the information specified in LAC 33:III.2122.G.1 through 6 for each calendar quarter during the reporting period. [LAC 33:III.2122.G]
- 129 Comply with 40 CFR 60 Subpart VV by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with LAC 33:III.2122. [LAC 33:III.50.I]

EQT029 **42-96: C-102 Process Recycle Compressor**

- 130 Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment. [LAC 33:III.211.I]
- 131 Repair according to LAC 33:III.2122.C.3 any regulated component observed leaking by sight, sound, or smell, regardless of the leak's concentration, except those covered under LAC 33:III.2122.C.1.d. [LAC 33:III.2122.C.1.c]
- 132 Make every reasonable effort to repair a leaking component, as described in LAC 33:III.2122, within 15 days, except as provided. [LAC 33:III.2122.C.3]
- 133 Determine the percent of leaking components at a process unit for a test period using the equation in LAC 33:III.2122.C.4. [LAC 33:III.2122.C.4]
- 134 Determine the total percent of leaking and unrepairable components using the equation in LAC 33:III.2122.C.5. [LAC 33:III.2122.C.5]
- 135 Compressor seals: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times a year). If a reading of 5,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.1.b.i]
 Which Months: All Year Statistical Basis: None specified
- 136 Flanged connectors: Presence of a leak monitored by visual, audible, and/or olfactory weekly. [LAC 33:III.2122.D.1.d.i]
 Which Months: All Year Statistical Basis: None specified
- 137 Instrumentation systems: Presence of a leak monitored by visual, audible, and/or olfactory weekly. [LAC 33:III.2122.D.1.e]
 Which Months: All Year Statistical Basis: None specified
- 138 All components: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of a leak detected by sight, smell, or sound, unless electing to implement actions as specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.3.b]
 Which Months: All Year Statistical Basis: None specified

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EQT029 **42-96: C-102 Process Recycle Compressor**

- 139 When a component which has a leak that cannot be repaired, as described in LAC 33:III.2122.C, is located, affix to the leaking component a weatherproof and readily visible tag bearing an identification number and the date the leak is located. Remove the tag after the leak has been repaired. [LAC 33:III.2122.F.1]
- 140 Equipment/operational data recordkeeping by survey log upon each occurrence of a leak. Include the leaking component information specified in LAC 33:III.2122.F.2.a through j. Retain the survey log for two years after the latter date specified in LAC 33:III.2122.F.2 and make said log available to DEQ upon request. [LAC 33:III.2122.F]
- 141 Submit report: Due semiannually, by the 31st of January and July, to the Office of Environmental Assessment, Air Quality Assessment Division. Include the information specified in LAC 33:III.2122.G.1 through 6 for each calendar quarter during the reporting period. [LAC 33:III.2122.G]
- 142 Comply with 40 CFR 60 Subpart VV by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with LAC 33:III.2122. [LAC 33:III.501]

EQT030 **WW-06: Wastewater Unit**

- 143 Comply with all applicable provisions 40 CFR 60 Subpart YYY - Standards of Performance for VOC Emissions from Organic Chemical Manufacturing Industry (SOCMI) Wastewater. [40 CFR 60]

EQT033 **Acetone Reactor**

- 144 Notify the DEQ with the specific provisions of 40 CFR 60.702 (40 CFR 60.702(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.702 that the operator elects to make. Conduct the performance test specified by 40 CFR 60.704 within 180 days after the change. Subpart RRR. [40 CFR 60.705(a)]
- 145 Submit reports: Due semiannually. Submit the initial semiannual report to the DEQ within 6 months after the initial start-up date. Include the information outlined in 40 CFR 60.705(i)(2), (i)(4), (i)(5), (i)(6), and (i)(8). Subpart RRR. [40 CFR 60.705(i)]

FUG001 **13-76: Plant Fugitive Emissions**

- 146 Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment. [LAC 33:III.2111]
- 147 Repair according to LAC 33:III.2122.C.3 any regulated component observed leaking by sight, sound, or smell, regardless of the leak's concentration, except those covered under LAC 33:III.2122.C.1.d. [LAC 33:III.2122.C.1.c]
- 148 Do not locate any valve, except safety pressure relief valves, at the end of a pipe or line containing volatile organic compounds unless the end of such line is sealed with a second valve, a blind flange, a plug, or a cap. Remove such sealing devices only when the line is in use, for example, when a sample is being taken. When the line has been used and is subsequently resealed, close the upstream valve first, followed by the sealing device. [LAC 33:III.2122.C.2]
- 149 Make every reasonable effort to repair a leaking component, as described in LAC 33:III.2122, within 15 days, except as provided. [LAC 33:III.2122.C.3]
- 150 Determine the percent of leaking components at a process unit for a test period using the equation in LAC 33:III.2122.C.4. [LAC 33:III.2122.C.4]
- 151 Determine the total percent of leaking and unrepairable components using the equation in LAC 33:III.2122.C.5. [LAC 33:III.2122.C.5]
- 152 Compressor seals: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times a year). If a reading of 5,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.1.b.i]
- Which Months: All Year Statistical Basis: None specified

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FUG001 13-76: Plant Fugitive Emissions

- 153 Valves in light liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times a year). If a reading of 1,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2122.C.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2122.E (skip period provisions). [LAC 33:III.2122.D.1.b.iii]
Which Months: All Year Statistical Basis: None specified
- 154 Pumps in light liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times a year). If a reading of 5,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.1.b.iv]
Which Months: All Year Statistical Basis: None specified
- 155 Valves in gas service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times a year). If a reading of 1,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2122.C.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2122.E (skip period provisions). [LAC 33:III.2122.D.1.b.v]
Which Months: All Year Statistical Basis: None specified
- 156 Pumps: Seal or closure mechanism monitored by visual inspection/determination weekly (52 times a year). [LAC 33:III.2122.D.1.c]
Which Months: All Year Statistical Basis: None specified
- 157 Flanged connectors: Presence of a leak monitored by visual, audible, and/or olfactory weekly. [LAC 33:III.2122.D.1.d.i]
Which Months: All Year Statistical Basis: None specified
- 158 Flanged connectors: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly. [LAC 33:III.2122.D.1.d.ii]
Which Months: All Year Statistical Basis: None specified
- 159 Instrumentation systems: Presence of a leak monitored by visual, audible, and/or olfactory weekly. [LAC 33:III.2122.D.1.e]
Which Months: All Year Statistical Basis: None specified
- 160 Pressure relief valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 within 24 hours after venting to the atmosphere. If a reading of 1,000 ppmv or greater (for petroleum refineries, SOCM, MTBE, and polymer manufacturing industry) or 2,500 ppmv or greater (for natural gas processing plants) is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.3.a]
Which Months: All Year Statistical Basis: None specified
- 161 All components: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of a leak detected by sight, smell, or sound, unless electing to implement actions as specified in LAC 33:III.2122.C.3. [LAC 33:III.2122.D.3.b]
Which Months: All Year Statistical Basis: None specified
- 162 Inaccessible valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (at a minimum). [LAC 33:III.2122.D.3.c]
Which Months: All Year Statistical Basis: None specified
- 163 Unsafe-to-monitor valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of conditions allowing these valves to be monitored safely. [LAC 33:III.2122.D.3.d]
Which Months: All Year Statistical Basis: None specified
- 164 When a component which has a leak that cannot be repaired, as described in LAC 33:III.2122.C, is located, affix to the leaking component a weatherproof and readily visible tag bearing an identification number and the date the leak is located. Remove the tag after the leak has been repaired. [LAC 33:III.2122.F.1]
- 165 Equipment/operational data recordkeeping by survey log upon each occurrence of a leak. Include the leaking component information specified in LAC 33:III.2122.F.2.a through j. Retain the survey log for two years after the latter date specified in LAC 33:III.2122.F.2 and make said log available to DEQ upon request. [LAC 33:III.2122.F]
- 166 Submit report: Due semiannually, by the 31st of January and July, to the Office of Environmental Assessment, Air Quality Assessment Division. Include the information specified in LAC 33:III.2122.G.1 through 6 for each calendar quarter during the reporting period. [LAC 33:III.2122.G]

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FUG001 13-76: Plant Fugitive Emissions

- 167 Fugitive emission piping components may be added to or removed from the permitted units, without triggering the need to apply for a permit modification, provided:
- Changes in components involve routine maintenance or are undertaken to address safety concerns, or involve small piping revisions with no associated emissions increases except from the fugitive emission components themselves;
 - The changes do not involve any associated increase in production rate or capacity, or tie in of new or modified process equipment other than the piping of the components;
 - Actual emission following the changes will not exceed the emission limits contained in this permit;
 - The components are promptly incorporated into any applicable leak detection and repair program.
- [LAC 33:III.501.C.6]
- 168 Comply with 40 CFR 60 Subpart VV by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with LAC 33:III.2.122. [LAC 33:III.501]

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- 169 Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.1.111 or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1.103]
- 170 Outdoor burning of waste material or other combustible material is prohibited. [LAC 33:III.1.109.B]
- 171 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1.1303.B]
- 172 Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2.113.A.1-5. [LAC 33:III.2.113.A]
- 173 Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance. [LAC 33:III.2.119]
- 174 Permittee shall comply with the requirements of the LDEQ-approved Optional Compliance Plan of April 12, 2006 during the Ozone Season (May 1 - September 30), including, but not limited to (excluding startup and shutdown):
- Recording the daily natural gas and process gas usage in each boiler;
 - Maintaining and operating the fuel flowmeters to achieve a 90% minimum data availability during the actual operating hours for the Ozone Season;
 - Recording the oxygen concentration in each boiler;
 - Maintaining and operating the oxygen monitors to achieve a 90% minimum data availability during the actual operating hours for the Ozone Season;
 - Operating each boiler to achieve compliance with the maximum 79.853 MMBTU/hr (HHV) average Ozone Season firing rate. The average Ozone Season firing rate for each boiler shall be calculated by dividing the total Ozone Season heat input by the total actual operating hours of the boiler during the Ozone Season;
 - Recording the daily average firing rate for each boiler in MMBTU/hr to achieve a 90% minimum data availability during the actual operating hours for the Ozone Season
 - Implementing procedures to operate each boiler (excluding startup and shutdown) within the oxygen conditions established during the compliance run of September 15 - 16, 2003; and incorporating approved NOx compliance plan changes to allow for an average ozone season firing rate limit of 79.853 and oxygen levels from 2.08 - 7.19 vol % dry.
 - Reporting required monitoring as specified by 40 CFR Part 70 General Condition K of this permit (required every March 31st), clearly identifying all instances of deviations from permit requirements, certified by a responsible company official
- [LAC 33:III.2.2]
- 175 Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited. [LAC 33:III.2901.D]

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176 If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G. [LAC 33:III.2901.F]

177 Submit permit application: Due prior to construction, reconstruction or modification unless otherwise provided in LAC 33:III.Chapter 5. Submit a timely and complete permit application to the Office of Environmental Services, Air Permits Division, as required in accordance with the procedures in LAC 33:III.Chapter 5. [LAC 33:III.501.C.1]

178 Maintain, to the extent practicable, a leak-free facility taking such steps as are necessary and reasonable to prevent leaks and to expeditiously repair leaks that occur. Update the written plan presently required by LAC 33:III.2113.A.4 within 30 days of receipt of this permit to incorporate these general duty obligations into the housekeeping procedures. The plan shall then be considered a means of emission control subject to the required use and maintenance provisions of LAC 33:III.905. Failure to develop, use, and diligently maintain the plan shall be a violation of this permit. (State Only). [LAC 33:III.501.C.6]

179 Carbon monoxide \leq 3.32 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

180 Nitrogen oxides \leq 115.84 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

181 Sulfur dioxide \leq 0.48 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

182 Acetaldehyde \leq 0.21 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

183 Chlorine \leq 0.014 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

184 Ethylene glycol \leq 0.70 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

185 Ethylene oxide $<$ 0.01 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

186 Where recordkeeping requirements apply, electronic recordkeeping shall be an acceptable means of complying with these requirements. [LAC 33:III.501.C.6]

187 Fugitive emission piping components may be added to or removed from the permitted units, without triggering the need to apply for a permit modification, provided:

- a) Changes in components involve routine maintenance or are undertaken to address safety concerns, or involve small piping revisions with no associated emissions increases except from the fugitive emission components themselves;
- b) The changes do not involve any associated increase in production rate or capacity, or tie in of new or modified process equipment other than the piping of the components;
- c) Actual emission following the changes will not exceed the emission limits contained in this permit;
- d) The components are promptly incorporated into any applicable leak detection and repair program.

[LAC 33:III.501.C.6]

188 Triethyl amine \leq 3.94 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

189 Particulate matter (10 microns or less) \leq 15.46 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

190 VOC, Total \leq 69.56 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

191 Annumonia \leq 9.49 tons/yr. [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: Annual maximum

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- 192 Sulfuric acid < 0.01 tons/yr. [LAC 33:III.501.C.6]
 Which Months: All Year Statistical Basis: Annual maximum
- 193 Any major source as defined in LAC 33:III.502 is designated a Part 70 source and is required to obtain a permit which will meet the requirements of LAC 33:III.507. [LAC 33:III.507.A.1.a]
- 194 No Part 70 source may operate after the time that the owner or operator of such source is required to submit a permit application under Subsection C of this Section, unless an application has been submitted by the submittal deadline and such application provides information addressing all applicable sections of the application form and has been certified as complete in accordance with LAC 33:III.517.B.1. No Part 70 source may operate after the deadline provided for supplying additional information requested by the permitting authority under LAC 33:III.519, unless such additional information has been submitted within the time specified by the permitting authority. Permits issued to the Part 70 source under this Section shall include the elements required by 40 CFR 70.6. The Louisiana Department of Environmental Quality hereby adopts and incorporates by reference the provisions of 40 CFR 70.6(a), as in effect on July 21, 1992. Upon issuance of the permit, the Part 70 source shall be operated in compliance with all terms and conditions of the permit. Noncompliance with any federally applicable term or condition of the permit shall constitute a violation of the Clean Air Act and shall be grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. [LAC 33:III.507.B.2]
- 195 Any permit application to renew an existing permit shall be submitted at least six months prior to the date of permit expiration, or at such earlier time as may be required by the existing permit or approved by the permitting authority. In no event shall the application for permit renewal be submitted more than 18 months before the date of permit expiration. [LAC 33:III.507.E.4]
- 196 Submit permit application: Due prior to commencement of construction, reconstruction, or modification of the source, for new or modified sources. Do not commence construction, reconstruction, or modification of any source required to be permitted under LAC 33:III.Chapter 5 prior to approval by the permitting authority. [LAC 33:III.517.A.1]
- 197 Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 5 when the administrative authority declares an Air Pollution Alert. [LAC 33:III.5609.A.1.b]
- 198 Activate the preplanned strategy listed in LAC 33:III.5611.Table 6 when the administrative authority declares an Air Pollution Warning. [LAC 33:III.5609.A.2.b]
- 199 Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 7 when the administrative authority declares an Air Pollution Emergency. [LAC 33:III.5609.A.3.b]
- 200 Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611.Tables 5, 6, and 7. [LAC 33:III.5609.A]
- 201 Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority. [LAC 33:III.5611.A]
- 202 During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations. [LAC 33:III.5611.B]
- 203 Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901. [LAC 33:III.5901.A]
- 204 Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur. [LAC 33:III.5907]
- 205 Submit amended registration: Due to the Department of Environmental Quality, Office of Environmental Compliance, Emergency and Radiological Services Division, within 60 days after the information in the submitted registration is no longer accurate. [LAC 33:III.5911.C]
- 206 Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment, Air Quality Assessment Division. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D. [LAC 33:III.919.D]

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- 207 Report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:1.Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Submit written reports to the department pursuant to LAC 33:1.3925. Submit timely and appropriate follow-up reports detailing methods and procedures to be used to prevent similar atmospheric releases. [LAC 33:III.927]
- 208 All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A. [40 CFR 60]
- 209 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 68.22. [40 CFR 68.12(b)(1)]
- 210 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain the records specified in 68.39(a) through (e) on the offsite consequence analyses. [40 CFR 68.39]
- 211 All affected facilities shall comply with all applicable provisions in 40 CFR 68. [40 CFR 68]
- 212 Submit Title V permit application for renewal: Due 180 calendar days before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
- 213 Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- 214 Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [40 CFR 70.6(a)(3)(iii)(B)]
- 215 Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]
- 216 Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B. [40 CFR 82.Subpart F]